

ECON 491 Education and Labor Markets: Topics, Data Analysis, and Original Research

Spring 2026

Course Meetings: Monday, Wednesday 11:00 AM - 12:20 PM
Course Location: DKH 123
Credits: 3

Professor: Russell Weinstein
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Office Hours: By appointment
Course website: canvas.illinois.edu

Course Description

This course focuses on topics related to education and labor markets, in which students will conduct independent research using data, econometric methods, and economic intuition. In the first part of the semester, the class will study academic papers in the following broad area: what is the impact of policies or economic shocks on education and employment outcomes of people and places? We will focus on understanding why the research question in these papers is interesting and important, and on the econometric methods used to identify the causal impact of the policy or the shock. In the second part of the course, students will focus on writing an empirical paper of their own on these topics, with a focus on identifying an interesting economic question, obtaining data, and implementing an econometric method that will identify causal effects.

Prerequisites include ECON 203; ECON 302; MATH 220/MATH 221. This course is designed for students who want to gain greater understanding of econometric strategies to identify causal effects, and who would like experience doing independent research.

Course Learning Outcomes and Objectives

- Students will become familiar with research on the impact of policies, economic shocks, and recessions on the education and employment of individuals and local labor markets.
- Students will gain a solid understanding of various econometric methods that can be used to identify the causal impact of policies or economic shocks
- Students will gain experience doing independent research, including identifying an interesting research question, an econometric strategy to identify causal effects, implementing the strategy in a statistical package, and interpreting the results in an intuitive way.

Course Texts

Wooldridge, Jeffrey M. (2025): Introductory Econometrics: A Modern Approach. 8th Edition, Cengage.

Articles listed below can be found on the course website.

Topics and Readings (subject to change with advance notice)

Course Part I: Review of Regression Analysis

Wednesday, January 21: Introduction and review of regression analysis

Reading: Wooldridge Chapter 2: Binary Explanatory Variable
Wooldridge Chapter 3: Multiple Regression Analysis

Monday, January 26: Multiple Regression Analysis: Inference, OLS Asymptotics

Reading: Wooldridge Chapter 4: Multiple Regression Analysis: Inference
Wooldridge Chapter 5: Multiple Regression Analysis: OLS Asymptotics

Course Part II: Effect of Place-Based Policies, Policy-Based Shocks, and Natural Disasters on Employment and Education

Wednesday, January 28: College Tuition and Higher Education Outcomes

Main reading: Acton, “Effect of Reduced Community College Tuition on College Choices and Degree Completion,” *Education Finance and Policy*, 16(3), 2021.

Optional reading: Denning, “College on the Cheap: Consequences of Community College Tuition Reductions” *American Economic Journal: Economic Policy*, 2017, Volume 9, Number 2.

Monday, February 2: Differences-in-Differences

Reading: Wooldridge Chapter 13: Pooling Cross Sections Across Time. Simple Panel Data Methods

Wednesday, February 4: Shocks to school district revenue and K-12 outcomes

Reading: Brunner, Hoen, and Hyman "School District Revenue Shocks, Resource Allocations, and Student Achievement: Evidence from the Universe of U.S. Wind Energy Installations." 2022. *Journal of Public Economics*, 206.

Monday, February 9: Two-Way Fixed Effects

Reading: Wooldridge Chapter 14-1: Fixed Effects Estimation
Wooldridge Chapter 14-4: General Policy Analysis with Panel Data

Wednesday, February 11: Place-based Policies I

Reading: Moretti and Wilson “State incentives for innovation, star scientists and jobs: Evidence from Biotech” *The Journal of Urban Economics*, 79, 2013.

Monday, February 16: Event Studies; Natural Disasters and Government Assistance to Individuals in Affected Areas

Reading: Wooldridge Chapter 18-6: Event Studies with Control Groups
Reading: Deryugina, “The Fiscal Cost Of Hurricanes: Disaster Aid Versus Social Insurance,”
American Economic Journal: Economic Policy, 2017, 9(3)

Wednesday, February 18: First Presentations

Monday, February 23: Propensity Scores

Reading: Wooldridge Chapter 19-1: Potential Outcomes, Parameters, and Assumptions
Wooldridge Chapter 19-2: Regression Adjustment
Wooldridge Chapter 19-3: Inverse Probability Weighting
Wooldridge Chapter 19-4: Combining IPW and RW

Wednesday, February 25: Place-based Policies II

Reading: Kline and Moretti “Local Economic Development, Agglomeration Economies and the Big Push: 100 Years of Evidence from the Tennessee Valley Authority,” *Quarterly Journal of Economics*, 129(1), 2014.

Course Part III: Effect of Recessions on employment and education

Monday, March 2: Recessions and Government Assistance to Individuals in Affected Areas

Reading: Hershbein and Stuart, “Place-Based Consequences of Person-Based Transfers: Evidence from Recessions”, *Journal of Public Economics*, 224: 104923, 2023

Wednesday, March 4: Graduating in a Recession

Reading: Rothstein, “The Lost Generation? Labor Market Outcomes for Post Great Recession Entrants,” *Journal of Human Resources* 58 (5). 2023.

Optional Reading: Weinstein, “The Great Recession and the Widening Income Gap Between Alumni of Elite and Less Selective Universities,” *American Economic Journal: Economic Policy*, Vol. 17(1), 2025

Monday, March 9: College Major Choice and Labor Market Shocks

Reading: Weinstein, “Local Labor Markets and Human Capital Investments,” *Journal of Human Resources*, Vol. 57(5), 2022.

Optional Reading: Acton, “Community College Program Choices in the Wake of Local Job Losses,” *Journal of Labor Economics*, 39(4), 2021.

Wednesday, March 11 Midterm

March 16, 18: Spring Break

March 23-April 1: Independent work; meetings with Professor Weinstein [sign up on Calendly]

April 6: Second presentations, discuss second draft expectations

April 8: Second Presentations

April 13-April 15: Independent work; meetings with Professor Weinstein [sign up on Calendly]

April 20: Discuss Final presentations and Final draft; Second draft due

April 22-April 29: Independent work; meetings with Professor Weinstein [sign up on Calendly]

May 4: Final Presentations

May 6 Final Presentations

Activities and Grades

Grades are determined by the following rubric:

Participation (iclicker): 8% (lowest dropped)

Reading quizzes: 10% (lowest dropped)

Initial presentation: 2%

Assignments: 20% (lowest dropped)

Midterm exam: 20%

Semester project: 40%

Each component is discussed below.

In-class i>clicker questions will be given in each lecture. Part of this grade will be based on your attendance in class. If you respond to each question during the lecture, you will be awarded five points. If you do not respond to all questions you will not be awarded any of these participation points. To account for other factors, I will also give five points if you miss responding to one question. This portion of your grade is based on being present in class for most of the class. The second part of your iclicker grade may be based on whether your responses are correct.

Reading quizzes will be given at the start of classes in which there was an assigned reading.

Initial presentation each student will make a short presentation on a policy, economic shock or event, or natural disaster that might affect employment or education. The presentation should be no more than five minutes, and include one discussion question for the class. The presentation should include a short overview of the policy or event (location, date, summary), and how you think this would affect employment or education (what types of people or places would be most affected, and why? Will the short-run effects be different than the long-run effects?). The presentation should include slides.

Assignments will be given throughout the semester before the midterm. Most of these will be completed in-class, but some may be assigned as take-home assignments.

A midterm exam will take place on March 11 during class.

The *semester project* has many components that will be due throughout the semester, outlined below.

Overview of Course Requirements and Dates; and Points for Each Component of the Term Paper:

The main focus of this course is an independent research project. In this project you will identify the causal impact of a policy or economic shock on education or employment, using the econometric methods we discuss in the first part of the course. The key component of this project is causal identification, instead of simply identifying a correlation. We will work on this throughout the semester in stages. Early in the semester (after you hand in your proposal on February 18), we will agree on a plan for the topic of your project and the components it should include by the time you hand in your final paper on the last day of class. I will have multiple opportunities to provide feedback throughout the semester as you present your progress and hand in drafts of your paper, as well as through meetings with me. All of the writing assignments will be graded based on the content as well as the quality of the writing.

January 21-February 16: Meet with Professor Weinstein to discuss project ideas (2 points)

February 18: One-page description of project due: research question, motivation/literature review, data, identification strategy. (10 points)

February 18: Presentation of proposed paper topic. This should be 5 minutes. (15 points)

March 4: First draft due: Introduction, literature review, data, empirical strategy. (10 points)

March 11: Midterm

March 16, 18 Spring Break

March 23-April 6: Meet with Professor Weinstein to discuss progress (2 points)

April 6, 8: Second presentation. This should be roughly 10 minutes. This must include a chart or a table related to your research question, using the data that you will use in your final paper. (20 points)

April 20: Second draft due: This should include the material in the first draft, and also include descriptive statistics and results from the empirical strategy. It should also outline what remains to be done. The paper should be close to being finished. I will return the draft with comments on what needs to be done for the final version. (10 points)

May 4: Final presentations (20 points)

May 6: Final paper due (10 points); Final presentations; Questions to others (1 point)

For the written assignments (one-page description, first draft, second draft, and final paper), there is a 10 point reduction in the grade for that component for each day it is late.

i>clicker

An i>clicker remote, or a subscription to i>clicker Student App is required for in-class participation. See below for details on grading policies for i>clicker questions.

You may purchase a six month subscription to the i>clicker Student App on the i>clicker website: <https://www.iclicker.com/pricing>

You may purchase any of the following models through the bookstore or a variety of online vendors (if you do not already have one):

The original i>clicker
i>clicker +
i>clicker 2

How to register your i>clicker:

To receive credit for the responses you submit with i>clicker, you must add this course by the beginning of the second class, January 26 at 11 AM. Students who register after this time will not receive credit for their participation in the classes before they added this course on their clicker account.

Follow the instructions from Technology services (<https://answers.uillinois.edu/illinois/120820>):

- Create a student account using your @illinois.edu address at iclicker.com or in the [iClicker Student app](#). For more details, you can view the video at the link above.
- Search for the iClicker course or by instructor name and then enroll in it.
- If you use a remote, you must [register its ID#](#) in your account profile.
- If you use the app, sign into the course session at the start of class before answering polls.

i>clicker Cheating Policy:

Bringing a fellow student's i>clicker to class and voting for them is cheating and a violation of the University Student Code (<http://studentcode.illinois.edu/>). If you are caught with a remote other than your own or have votes in a class that you did not attend, you will forfeit all clicker points and may face additional disciplinary action.

Stata

Some of the assignments and lecture slides may use the software package Stata. I prefer that you use Stata for the analysis in your semester project, but you may use any software package for the project. However, I will not be able to assist you if you use other packages.

Stata is available through the university's WebStore as a virtual application. <https://webstore.illinois.edu/shop/product.aspx?zpid=6077>. This costs \$37.50. You may also purchase a student copy of STATA so you have your own version at <https://www.stata.com/order/new/edu/profplus/student-pricing/> 6 month license for STATA/BE is \$48. The BE version should be sufficient for your purposes

Course Policies

Grading Policies

Late responses to the assignments, iclicker questions, and reading quizzes will not receive credit, but a missed assignment can be used as the dropped score.

Computer/Phone/Tablet Policy

To facilitate learning, discussion, and engagement, we will not allow the use of computers, phones, or tablets in class, except for certain assignments. Students will be notified by Prof. Weinstein about the assignments for which they can use computers, tablets, or phones in class. Students will also be permitted to use their phone to answer the iClicker questions in class.

In this course, we will be assigning +/- letter grades. I will assign grades as follows:

A	\geq than 93.0
A-	90.0 to 92.9
B+	87.0 to 89.9
B	83.0 to 86.9
B-	80.0 to 82.9
C+	77.0 to 79.9
C	73.0 to 76.9
C-	65.0 to 72.9
D	60.0 to 64.9
F	less than 60.0

Academic Assistance

Students are encouraged to utilize the many resources we have throughout campus to assist with academics. We recommend that you seek them out starting early in the semester, not just in times of academic need, in order to develop good study habits and submit work which represents your full academic potential. Many resources are found on the Economics Website including details about the Economics Tutoring Center, Academic Advising, and other academic support options: <https://economics.illinois.edu/academics/undergraduate-program/academic-student-support>

Academic Integrity

According to the Student Code, 'It is the responsibility of each student to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions.' Please know that it is my responsibility as an instructor to uphold the academic integrity policy of the University, which can be found here: <https://studentcode.illinois.edu/article1/part4/1-401/>

Academic dishonesty may result in a failing grade. Every student is expected to review and abide by the Academic Integrity Policies. It is your responsibility to read this policy to avoid any misunderstanding. Do not hesitate to ask the instructor(s) if you are ever in doubt about what constitutes plagiarism, cheating, or any other breach of academic integrity. **Read the full Student Code at** <https://studentcode.illinois.edu/>

Students with Disabilities

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES you may visit 1207 S. Oak St., Champaign, call 333-4603 (V/TTY), or e-mail a message to disability@illinois.edu. DRES Website: www.disability.illinois.edu/

Connie Frank CARE Center /Community of Care

As members of the Illinois community, we each have a responsibility to express care and concern for one another. If you come across a classmate whose behavior concerns you, whether in regards to their well-being or yours, we encourage you to refer this behavior to the Connie Frank CARE Center (217-333-0050 or <http://odos.illinois.edu/community-of-care/referral/>). Based on your report, the staff in the Connie Frank CARE Center reaches out to students to make sure they have the support they need to be healthy and safe. Further, we understand the impact that struggles with mental health can have on your experience at Illinois. Significant stress, strained relationships, anxiety, excessive worry, alcohol/drug problems, a loss of motivation, or problems with eating and/or sleeping can all interfere with optimal academic performance. We encourage all students to reach out to talk with someone, and we want to make sure you are aware that you can access mental health support at the Counseling Center (<https://counselingcenter.illinois.edu/>) or McKinley Health Center (<https://mckinley.illinois.edu/>).

For mental health emergencies, you can call 911 or walk into the Counseling Center, no appointment needed.

Disruptive Behavior

Behavior that persistently or grossly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. A student responsible for disruptive behavior may be required to leave class pending discussion and resolution of the problem and may be reported to the Office for Student Conflict Resolution for disciplinary action.

Emergency Response Recommendations

Emergency response recommendations can be found at the following website: <http://police.illinois.edu/emergency-preparedness/>. I encourage you to review this website and the campus building floor plans website within the first 10 days of class. <http://police.illinois.edu/emergency-preparedness/building-emergency-actionplans/>.

Religious Observances

The Religious Observance Accommodation Request form is available at <https://odos.illinois.edu/community-of-care/resources/students/religious-observances/>. Submit the form to the instructor and to the Office of the Dean of Students (helpdean@illinois.edu) as soon as possible.

Family Educational Rights and Privacy Act (FERPA)

Any student who has suppressed their directory information pursuant to Family Educational Rights and Privacy Act (FERPA) should self- identify to the instructor to ensure protection of the privacy of their attendance in this course. See <http://registrar.illinois.edu/ferpa> for more information on FERPA. Student information and records will not be released to anyone other than the student unless the student has provided written approval or as required by law.

Sexual Misconduct Reporting Obligation

The University of Illinois is committed to combating sexual misconduct. Faculty and staff members are required to report any instances of sexual misconduct to the University's Title IX and Disability Office. In turn, an individual with the Title IX and Disability Office will provide information about rights and options, including accommodations, support services, the campus disciplinary process, and law enforcement options. A list of the designated University employees who, as counselors, confidential advisors, and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: <http://www.wecare.illinois.edu/resources/students/#confidential>. Other information about resources and reporting is available here: <http://wecare.illinois.edu/>.

Student Support

The Counseling Center is committed to providing a range of services intended to help students develop improved coping skills in order to address emotional, interpersonal, and academic concerns. Please visit their website to find valuable resources and services: <https://counselingcenter.illinois.edu/>.

Counseling Center Information: 217-333-3704

Location: Room 206, Student Services Building (610 East John Street, Champaign IL)

McKinley Mental Health Information: 217-333-2705

Location: 3rd Floor McKinley Health Center 1109 South Lincoln, Urbana, IL

Emergency Dean: The Emergency Dean may be reached at (217) 333-0050 and supports students who are experiencing an emergency situation after 5 pm, in which an immediate University response is needed and which cannot wait until the next business day. The Emergency Dean is not a substitute for trained emergency personnel such as 911, Police or Fire. If you are experiencing a life threatening emergency, call 911. Please review the Emergency Dean procedures: <http://odos.illinois.edu/emergency/>

Academic Dates and Deadlines

Students should make note of important academic deadlines for making changes to their courses (add, drop, credit/no-credit, grade replacement, etc.). <https://registrar.illinois.edu/academic-calendars>

Please check with your academic department regarding specific procedures and policies.

Run > Hide > Fight

Emergencies can happen anywhere and at any time. It is important that we take a minute to prepare for a situation in which our safety or even our lives could depend on our ability to react quickly. When we're faced with almost any kind of emergency – like severe weather or if someone is trying to hurt you – we have three options: Run, hide or fight.



Run

Leaving the area quickly is the best option if it is safe to do so.

- ▶ Take time now to learn the different ways to leave your building.
- ▶ Leave personal items behind.
- ▶ Assist those who need help, but consider whether doing so puts yourself at risk.
- ▶ Alert authorities of the emergency when it is safe to do so.



Hide

When you can't or don't want to run, take shelter indoors.

- ▶ Take time now to learn different ways to seek shelter in your building.
- ▶ If severe weather is imminent, go to the nearest indoor storm refuge area.
- ▶ If someone is trying to hurt you and you can't evacuate, get to a place where you can't be seen, lock or barricade your area if possible, silence your phone, don't make any noise and don't come out until you receive an Illini-Alert indicating it is safe to do so.



Fight

As a last resort, you may need to fight to increase your chances of survival.

- ▶ Think about what kind of common items are in your area which you can use to defend yourself.
- ▶ Team up with others to fight if the situation allows.
- ▶ Mentally prepare yourself – you may be in a fight for your life.

Please be aware of people with disabilities who may need additional assistance in emergency situations.

Other resources

- ▶ police.illinois.edu/safe for more information on how to prepare for emergencies, including how to run, hide or fight and building floor plans that can show you safe areas.
- ▶ emergency.illinois.edu to sign up for Illini-Alert text messages.
- ▶ **Follow the University of Illinois Police Department** on Twitter and Facebook to get regular updates about campus safety.